

REMARKS

The Office action of December 9, 2010, has been carefully considered.

The previous rejection of the claims has been withdrawn. Claims 14, 16, 17, 18 and 21 are now rejected under 35 USC 103(a) over Fillmore in view of Magerle, Schneider and Amberg et al. In addition, Claim 15 has been rejected under 35 USC 103(a) as obvious over Fillmore in view of Magerle, Schneider, Amberg et al and Buhler, and Claims 22-26 have been rejected under 35 USC 103(a) as obvious over Fillmore in view of Magerle, Schneider, Amberg et al and Axelrad.

Claim 14 has now been amended to recite that the top wall includes a protuberance extending from the top wall parallel to the axis of the neck, and further to recite that during opening of the molding tool by relative displacement of the moving parts, a moving part of the molding tool applies a bending force on the protuberance. These amendments are supported by the specification at page 18, lines 11-15, and at page 21, line 30 to page 22, line 4.

According to Claim 14 as amended, detachment of the top wall of the molded part results from the relative movement of the parts of the molding tools. This effect results from the interaction between the protuberance formed on the top wall of the molded part, and a part of the molding tool which applies a bending force on the protuberance, the bending force being sufficient that the top wall is detached from the molded part at the notch. This is not suggested by the cited art.

The primary reference to Fillmore has been cited to show a compression molding method for manufacturing plastic parts, which as noted in the Office action does not include the details associated with the compression molding method of the invention.

As discussed in the previous response, Magerle has been

cited as showing a method of compression molding plastic parts having a neck provided with an orifice, and shows the tools used to perform the process.

The Schneider reference addresses the removing of a top wall from a molded piece comprising a neck, and requires a manual action from the user to remove the top wall. The reference does not suggest means for automatically achieving removal of the top wall by movement of the tool during molding of the part.

Amberg et al has been cited to show a method of compression molding using continuously moving tools, but does not disclose or suggest interaction between a protuberance extending from the top wall and a moving part of the molding tool.

The Buhler reference is no longer cited against Claim 14, and is cited only against Claim 15. Buhler discloses means for removing a top wall integrated into the mold, but this means is clearly distinct from the claimed invention and requires an adaptation of the mold in order to integrate a moving cutting collar within a part of the mold, and which must be moved after the injection of the part is completed. The means disclosed in Buhler is not adapted for use in the claimed process, since a continuous movement of the parts of the molding tool will not enable the detachment of the top wall to be performed by the cutting tool. Moreover, the addition of such a moving cutting tool within the mold leads to an increase in the cost of the mold, which is one of the issues to which the claimed invention is specifically directed.

The Hwang et al reference only addressees the issue of removing feed sprues from molded pieces, which is a technical issue different from that addressed by the claimed invention.

The Axelrad reference has been discussed previously, and

does not cure the defects of the references discussed above.

Based upon the cited prior art references, one of ordinary skill in the art would only be directed to produce molding pieces comprising a neck defining an orifice, where the orifice is closed by a top wall that is either manually removed by a user after the molding of the piece (Schneider), or automatically detached by a moving cutting tool disposed within the mold (Buhler), whether the molding process is injection molding or compression molding.

One of ordinary skill in the art would have no reason to modify the teachings of these documents in order to obtain the claimed invention, and therefore would be limited to either structures that require manual removal of the top wall or complex mold structures leading to high costs for the mold and the overall process in resulting the molded parts.

Withdrawal of these rejections is requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



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